DOCUMENT RESUME

ED 299 770 EC 211 049

TITLE Assistive Devices. Exceptional Child Education, Curriculum K-12.
INSTITUTION Jefferson County Public Schools, Louisville, Ky.
PUB DATE 84
NOTE 143p.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Assistive Devices (for Disabled); Behavioral Objectives; *Communication Aids (for Disabled); *Disabilities; Elementary Secondary Education; *Mobility Aids; Resource Materials; Sensory Aids; Skill Development; Task Analysis; *Teaching Methods

ABSTRACT

The purpose of the Jefferson County (Kentucky) Public Schools K-12 Exceptional Child Education Curriculum is to facilitate teaching, and thereby learning, by providing a foundation of information and skills to be presented. The Assistive Devices curriculum is designed to help exceptional students learn to use specialized equipment. Assistive devices included are: amplification devices, braille writers, "Canon communicator," cassette recorder/player, corrective lenses, "Form-a-Phrase," headphones, magnifier, "Memowriter," "Optacon," record player, "Scan 40 Communicator," typewriter, "Visualtek," walker/crutches, and wheelchair. The guide presents the devices alphabetically, and objectives for learning each device are presented in sequential order. Major steps in the task analysis of each objective are listed, along with activities, materials, and resources for each step. Materials are coded for the appropriate grade level--elementary, middle school, or high school--and teacher materials are also listed. The guide also contains the Jefferson County public school philosophy, the board of education goals, and the exceptional child education philosophy and goals. (JDD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED299770

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

EC 211049

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Betty Muntz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EXCEPTIONAL CHILD EDUCATION

CURRICULUM K-12: ASSISTIVE DEVICES

1984

JEFFERSON COUNTY PUBLIC SCHOOLS

Department of Instruction and Support Services

ADMINISTRATIVE STAFF

Donald W. Ingwerson, Ed.D.	Superintendent
Dawson Orman	Deputy Superintendent for Instruction and Support Services
Booker T. Rice, Ed.D.	Assistant Superintendent for Instruction
David B. Weber	Director, Exceptional Child Education

BOARD OF EDUCATION

Sherry K. Jelsma, Chairman	Rick Johnstone
Rev. C. Mackey Daniels, Vice-Chairman	Robert J. Schmitt
Jim Hearn	Michael W. Wooden
John D. Heyburn	

Jefferson County Board of Education
Materials Production, Durrett Education Center
4409 Preston Highway
Louisville, Kentucky 40213

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER
OFFERING EQUAL EDUCATIONAL OPPORTUNITIES

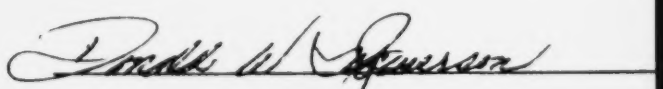
SUPERINTENDENT'S MESSAGE

The Jefferson County Public Schools is dedicated to setting and achieving a standard of educational excellence for all students whom the system serves.

This standard responds to three interfacing documents, the Jefferson County Public Schools Philosophy of Education which promotes self-realization in a free society, the Learner Goals which proclaim the community's educational values, and the District Comprehensive Educational Plan which provides the Board of Education's commitment of resources.

Providing this standard of educational excellence is an ongoing and evolving process of assessment, development, and evaluation. It is professionals attending the cognitive and affective needs of the students. It emphasizes curriculum and curriculum-related processes.

The school system uses feedback and evaluation data, including professional staff opinion and test scores to identify programmatic needs and to assess the achievement of stated objectives. Since curriculum development is characterized by continuous change and adaptation, we urge all interested persons to make their concerns known, thus ensuring continuing community input.



Donald W. Ingwerson, Ed.D., Superintendent
Jefferson County Public Schools

TABLE OF CONTENTS

Acknowledgments vii

Jefferson County Public Schools Philosophy ix

Board of Education Goals xi

Exceptional Child Education Philosophy and Goals xiii

Purpose and Use of the Guide xv

Strands . . . . .
- Amplification Devices 1
- Braille Writer 11
- Canon Communicator 13
- Cassette Recorder/Player 14
- Corrective Lenses 16
- Form-a-Phrase 22
- Headphones 24
- Magnifier 26
- Memowriter 29
- Optacon 31
- Record Player 36
- Scan 40 Communicator 38
- Typewriter 40
- Visualtek 42
- Walker/Crutches 44
- Wheelchair 47

Resources 56

Citizen's Request for Review and Reevaluation of Instructional Materials
Request for Reconsideration of Instructional Materials

ACKNOWLEDGMENTS

The Department of Instruction and Support Services of the Jefferson County Public Schools expresses grateful appreciation to the following people for their assistance in preparing the Exceptional Child Education Curriculum K-12: Assistive Devices.

Writers

Donna Cundiff	Teacher of the Visually Handicapped, Durrett Education Center
Marilyn Fuhrman	Teacher of the Visually Handicapped, Durrett Education Center
Janette Jacobs	Teacher of the Multiple Handicapped, Hawthorne Elementary
Mary Beth Krebs	Speech/Language Clinician, Cerebral Palsy School
Mary Whittingham	Teacher of the Multiple Handicapped, Cerebral Palsy School
Mary Ann Woods	Teacher of the Visually Handicapped, Churchill Park School

Consultants

Jan Moseley	Low Incidence Specialist
Joyce Paul	Coordinator of Exceptional Child Instructional Services

Exceptional Child Education--Curriculum K-12: Assistive Devices was edited and printed by Materials Production, Durrett Education Center.

JEFFERSON COUNTY PUBLIC SCHOOLS PHILOSOPHY

WE BELIEVE . . .

That each person is of worth, is endowed with human dignity, is unique, and is entitled to respect as an individual.

That self-realization, self-discipline, quality in human relationships, and appreciation for one's cultural heritage are essential to the full development of the individual.

That the contributions of our diverse backgrounds--racial, ethnic, religious, social, economic, and political--are essential to the strength and richness of our society.

That the correlation of these backgrounds in our school system, both in curriculum and in practice, is necessary and essential to quality education.

That the freedoms guaranteed by the Constitution of the United States and by the Bill of Rights are essential to a democratic society and that all persons need to understand both the privileges and the responsibilities of citizenship.

That since we live in a changing world, all persons need to be prepared to meet, evaluate, and adjust to change creatively and intelligently.

That effective education comes from a responsible and mutual effort on the part of the school, the church, the family, and the community-at-large. This includes sharing in the determination of goals and in providing necessary resources.

That the school, student, family, and the community-at-large need to realize the significant role played by the other in the educative process.

That the public school is a fundamental part of our tradition and has a responsibility to the individual and the society in which we live.

WE BELIEVE THAT IT IS THE GOAL OF OUR SCHOOLS . . .

To provide education at the earliest appropriate age and to seek and identify the needs of each individual student on a continuing basis.

To provide the necessary tools and incentives to assure each student the highest quality of education.

To provide the necessary programs, training, and qualified and supportive personnel to motivate all students to achieve according to their individual learning patterns and rates of growth in order to realize their maximum potentials intellectually, economically, socially, culturally, and physically.

To provide a climate wherein the uniqueness of the cultures that each individual brings to the classroom setting is positively received.

To provide the structures, policies, and practices that reflect the multi-ethnic nature of our community through the composition of administrative staff, faculties, and student bodies.

WE BELIEVE . . .

That the philosophy of education of the Jefferson County Public Schools must be regularly reevaluated by the schools, students, parents, and the community-at-large.

BOARD OF EDUCATION GOALS

Staff will continue the commitment to provide an improved quality educational program and an integrated school system.

Students will master basic skills which include the areas of vocational, artistic, and computer education.

Employees' performance and job skills will be evaluated and the staff will be recognized for improved efficiency, productivity, and contributions.

Public information and community programs will be based on a comprehensive plan of open and honest communication to enhance community ownership.

Staff will operate a cost-effective school system designed around student needs.

EXCEPTIONAL CHILD EDUCATION PHILOSOPHY AND GOALS

The Jefferson County Public Schools is committed to providing high quality education for handicapped students. Exceptional Child Education (ECE) programs are designed to meet the needs of students whose approach to learning is different from that of their peers. ECE students use the curriculum and materials of the general education program whenever appropriate, but have access to special instructional techniques and materials as necessary. The ECE curriculum parallels many areas of the general education curriculum, emphasizing certain skills and adding others to meet the needs of the exceptional learner. ECE programs concentrate on the development of those basic academic and daily living skills which will be needed for future employment and independent adult living.

PURPOSE AND USE OF THE GUIDE

The purpose of the K-12 Exceptional Child Education curriculum is to facilitate teaching, and therefore learning, by providing a foundation of information and skills to be presented. The curriculum guides provide a framework of instruction for the exceptional learner. Each learner's specific needs should determine the curricular strands needed for successful progress. Activities, materials and resources suggested to teach the steps of each objective are provided but neither they, nor the objectives themselves, are intended to be the total learning experience for any student. Rather, the guide should be viewed as a point of origin for instruction with embellishments and refinements to be added by each Exceptional Child Education teacher. It is expected that Exceptional Child Education teachers will use the information within this guide to provide a consistent district-wide structure to teaching pupils with special needs. However, each teacher's unique instructional style, and the documented needs of students, will contribute to the creation of a total environment conducive to learning.

The sequence in which skills are addressed and the amount of time devoted to an area will vary according to the needs of individual students and the goals established on their Individual Education Programs. Whenever possible, however, it is recommended that units of study in such content areas as science and social studies follow the general scope and sequence of the regular program. ECE teachers are also strongly encouraged to use general education curriculum guides as instructional resource materials.

Each subject within the Exceptional Child Education Curriculum has been arranged in a format comparable to the subjects in the general education curriculum. Major objectives are keyed to the general education curriculum by denoting the grade levels at which these skills are introduced (I), mastered (M), reinforced (R), or tested (#). Some objectives are also keyed to the proficiency objectives with the grade level presented first (3:4) or (8:15). Identifying phrases listing the subject, strand and learning head each page. Vocabulary words are listed, usually on each page. Major objectives proceed down the left side of the page, usually in a sequential order. Major steps in the task analysis of each objective are listed in the center of the page, while activities, materials and resources for each step (or in some cases, for each objective) are aligned on the right.

Major objectives are keyed not only to the general education curriculum, but also to assessment instruments such as the Comprehensive Test of Basic Skills, the Brigance Diagnostic Inventory of Essential Skills, and the KeyMath Diagnostic Arithmetic Test. Grade levels are recommended for student materials: E--Elementary School, M--Middle School and H--High School. Teacher materials are coded T. Teacher materials appropriate to only certain age students are dually coded, e.g., T-E, M indicates material appropriate for use by a teacher who is working with elementary or middle school students.

SCOPE AND SEQUENCE

SCOPE

The Assistive Devices curriculum is designed to help students learn to use specialized equipment. While it is usually in the low incidence categories that the most specialized, highly technical devices are used, any ECE student may have the need for independent use of a cassette recorder or record player. Devices included in this section are:

- Amplification Devices
- Braille Writer
- Canon Communicator*
- Cassette Recorder/Player
- Corrective Lenses
- Form-a-Phrase*
- Headphones
- Magnifier
- Memowriter*
- Optacon
- Record Player
- Scan 40 Communicator*
- Typewriter
- Visualtek
- Walker/Crutches
- Wheelchair

Any of these devices might be used with any Exceptional Child Education student regardless of category. However, many devices will be associated with one specific category of ECE as follows:

<u>Hearing Impaired</u>
- Amplification Devices

<u>Visually Impaired</u>
- Braille Writer
- Corrective Lenses
- Magnifier
- Memowriter
- Optacon
- Typewriter
- Visualtek

<u>Physically Handicapped and Other Health Impaired</u>
- Canon Communicator
- Form-a-Phrase
- Memowriter
- Scan 40 Communicator
- Typewriter
- Walker/Crutches
- Wheelchair

SEQUENCE

Objectives for teaching the use of each assistive device are arranged in sequential order. Students needs must be determined by teachers' judgment so the devices themselves can not be arranged in any set sequence. Rather, the appropriate sections may be used from this curriculum.

For students communicating with electronic/computerized communication device, such as those asterisked on the preceding page, certain prerequisites are necessary.

Suggested prerequisite skills:

Consistent yes/no response
Adequate attending skills
Cognitive level at least at the (4) four-year level
Abiltity to communicate via a teacher/clinician-made communication board, book, or other appropriate system.

Since students who use communication devices are typically physically handicapped, this curriculum presupposes teacher assistance in positioning the student and machine, attaching any interface switches appropriately, and, sometimes, turning on the machine. Although there are many types of interfacing switches utilizing any volitional movement of the student, the basic treadle switch was used as the means of activating scanning-type machines.

> The assistive devices presented in this guide are those currently being used in the JCPS Exceptional Child Education Program. Although other similar products are available, specific devices are mentioned because the purpose of this curriculum is to give operational instructions for hands-on experience.

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Adjustment to amplification devices

VOCABULARY amplification, hearing aid, ear(s), listen, volume control

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Wears amplification instrument consistently.	Sits quietly while aid(s) is placed on ear.		
	Allows aid(s) on ear(s) for increasing amount of time.	Demonstrate wearing aid for student.	Hearing aid Levels E, M, H
	Allows aid to be removed.	Have a teacher/student discussion.	Booklets: Orientation to Hearing Aids. Alexander Graham Bell Association for the Deaf, Inc. Levels T-M, H
	Puts on and removes aid daily.		
Exhibits a listening attitude.	Understands volume control when regulated by another.	Present student with varied volumes. Let student identify problems.	Hearing aid
	Recognizes proper volume setting.	Suggest practice opportunities at home and at school as appropriate.	Pamphlet: Hearing Aids, a Guide to Their Wear and Care, 1981. Levels T-H
	Regulates volume control, adjusting to auditory environment.	(Teacher models.)	

STRAND Amplification Devices

SUBJECT Assistive Devices

LEARNING Adjustment for Amplification Devices

VOCABULARY amplification, hearing aid, volume control

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses amplification to facilitate communication.	Adjusts volume control to auditory environment. Recognizes proper volume setting on aid. Discriminates and regulates amplification in right and left aid. Tells when aid is not working properly.	Provide varied environments for student control of amplification. Suggest practice opportunities at home and at school as appropriate (change volume on TV, radio, stereo). Assist student. (Teacher models.)	Hearing aid Varied environments: Inside: Rooms with rugs, draperies, acoustical ceilings Rooms with tile floors, curtains, plaster ceilings, Rooms with and without furniture; with and without people Outside: Playground Street TV, radio, stereo Grade levels: E,M,H

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Maintenance and Care of Amplification Devices

VOCABULARY amplification, temperature controlled environment

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Keeps amplification instrument in designated area.	Removes aid. Places amplification instrument in designated safe area. Stores aid in proper temperature controlled environment.	Discuss with student environmentally controlled storage areas. Discuss pamphlet. Demonstrate safe storage places. Suggest practice opportunities at home and at school as appropriate: getting ready for recess getting ready for bed getting ready for bathing, swimming. Give assistance.	Hearing aid, storage areas Levels: E, M, H Pamphlet: Facts About Hearing and Hearing Aids, 1978. Levels: E, M, H

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Maintenance and Care of Amplification Devices

VOCABULARY batteries, maintenance, battery tester

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Maintains batteries.	Chooses correct batteries for aid. Tests batteries for weakness. Keeps battery clean by removing from aid and rubbing with pencil eraser. Wipes batteries with dry cloth if white powder appears. Removes batteries from aid each night. Keeps extra batteries in cool, dry place. Keeps batteries from touching metal objects when not in aid. Inserts batteries into aid correctly.	Present student with batteries in various conditions; ask student to identify specific problems. Discuss steps to maintain batteries. (Teacher models.) Suggest practice opportunities at home and school as appropriate. Instruct student to check and insert batteries when getting ready for school. Instruct student to check and insert batteries after recess.	Pencil eraser, batteries, battery tester, hearing aid, dry cloth Levels: E, M, H

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Maintenance and Care of Amplification Devices

VOCABULARY batteries, maintenance, battery tester, ear molds, plastic tubing

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Checks batteries with battery tester.		
	Recharges battery (if applicable).		
Maintains ear molds and plastic tubing.	Checks daily for wax build-up in ear mold.	Demonstrate checking and cleaning of ear mold.	Ear molds, tubing, warm water, soap Levels: E, M, H
	Washes ear mold weekly with warm, soapy water.	Discuss procedures with student.	
	Replaces plastic tube when hard and yellow.	Provide hand-over-hand guidance.	
		Suggest practice opportunities at home and school when appropriate, e.g., every Friday afternoon at school.	
		Give assistance.	
		(Teacher models.)	

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Operation of Amplification Devices

VOCABULARY amplification, ear mold

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Inserts amplification instrument.	Inserts ear mold into ear. Attaches ear mold to hearing aid. Inserts ear mold with aid attached.	(Teacher models.) Give assistance. Suggest practice activities at appropriate times at home and school, e.g., getting dressed for school, after recess. Discuss procedure with student. Provide hand-over-hand guidance. Fade level of assistance.	Ear mold, hearing aid Levels: E, M, H

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Operation of Amplification Devices

VOCABULARY volume control, directional sound source

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Regulates controls properly.	Demonstrates knowledge of volume control.	Demonstrate in activities requiring adjusting and/or regulating volume control.	Hearing aid, radio, TV stereo, tape recorder with earphones Levels: E, M, H
	Recognizes proper volume setting.	Increase and decrease volume on tape recorder with earphones, radio, TV, and stereo which uses directional speakers.	
	Adjusts volume control to auditory environment.	Have student practice activities at home and at school.	
	Discriminates between volume of right and left aid setting.	Give assistance.	
		Provide hand-over-hand guidance.	
		Fade level of assistance.	

STRAND Amplification Devices

SUBJECT Assistive Devices

LEARNING Operation of Amplification Devices

VOCABULARY hearing aid

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Completes hearing aid performance check.	Wipes off hearing aid daily. Recharges battery. Stores hearing aid in dry, clean place. Tests batteries. Checks ear mold opening for wax. Turns aid off and removes battery. Washes ear mold weekly. Has aid checked by audiologist every six months. Determines when to replace plastic tube. Determines when batteries need changing. Replaces ear mold, as needed. Replaces hearing aid, as needed.	Present a variety of maintenance activities. Have student diagnose and check hearing aid performance. Assist student when necessary. Discuss procedure with student. Provide hand-over-hand guidance, as needed. Suggest practice opportunities at home and school at appropriate times. (Teacher models.) Fade level of assistance.	Hearing aid, recharger, storage area, battery tester, soap and water, plastic tubing, batteries, ear mold Levels: E, M, H

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Troubleshooting Hearing-Aid Problems

VOCABULARY amplification, volume, power control, tone control, battery, charged battery, weak battery, dead battery

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Reports when amplification device is malfunctioning.	Recognizes malfunctioning of amplification as a result of improperly fitting ear mold. (feedback) Tells another when aid is malfunctioning. Identifies problems of insufficient amplification, volume, power control, tone control.	Present student with various malfunctioning amplification devices and have him/her identify problem. Suggest practice opportunities at home and at school at appropriate times. (Teacher models.) Give assistance as needed. Fade level of assistance.	Amplification device, hearing aid, tape recorder with earphones Levels: E, M, H
Replaces malfunctioning or dead battery.	Recognizes weak or dead battery. Recognizes upside down battery. Recognizes leaking battery. Recognizes inappropriate battery size.	Place various problem batteries into aid for student to diagnose problem. Discuss diagnoses and remedies. Suggest practice opportunities at home and school as appropriate, e.g., morning and night, after recess. (Teacher models.) Give assistance. Fade level of assistance.	Hearing aid, batteries: charged, weak, dead, and varied in size, shape, thickness Levels: E, M, H

STRAND Amplification Devices SUBJECT Assistive Devices

LEARNING Troubleshooting Hearing-Aid Problems

VOCABULARY battery, charged battery, weak battery, dead battery

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Performs minor repairs/ adjustments for amplification device.	Changes dead or weak batteries. Adjusts placement of upside down battery. Recognizes inappropriate battery size. Identifies hole in tube. Recognizes cracked case. Recognizes frayed cord, if applicable. Notices or recognizes plugged ear mold opening. Recognizes and repairs broken hook.	(Teacher models.) Fade level of assistance. Provide hand-over-hand guidance. Discuss repairing of amplification devices. Give step-by step verbal guidance. Suggest practice opportunities at home and school as appropriate. Give assistance.	Pin, pipe cleaner, glue, battery, tube, cord, ear mold, tape, cracked case Levels: E, M, H

STRAND Braille Writer SUBJECT Assistive Devices

LEARNING Operation of Machine (Perkins Braille Writer)

VOCABULARY release, clamp

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Removes paper correctly.	Rolls braille paper away from self. Releases paper lock. Removes paper.	Provide hand-over-hand assistance. (Teacher models.)	Perkins Braille Writer, braille paper Levels: E, M, H
Inserts paper with holes on left side.	Places paper between rubber roller and metal roller located at the back of the braille writer. Clamps the paper lock. Using gray knobs on either side of braille writer, turns roller toward self. Rolls paper until it stops. Pushes line space key one time before beginning to write.	Suggest practice at home and at school at appropriate and practical times.	Perkins Braille Writer, unpunched braille paper, punched braille paper Levels: E, M, H

STRAND Braille Writer SUBJECT Assistive Devices

LEARNING Operation of Machine (Perkins Braille Writer)

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses keys in combination correctly.	Identifies purpose for each key on braille writer. Identifies orally and tactually locates each key and the corresponding number. Orally identifies back-space key, line-space key, and space key; tactually locates keys. Follows oral directions in forming various braille characters. States how to form various braille characters. Pushes keys in combination to form: letters, contractions, numbers, punctuation marks.	Suggest practice at home and at school. Discuss procedure with student.	Perkins Braille Writer, braille paper Levels: E, M, H

STRAND Canon Communicator

SUBJECT Assistive Devices

LEARNING Operation of Machine

MODE Direct Selection

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Turns machine on/off.	Manipulates power switch to turn machine on. Manipulates power switch to turn machine off.	Instruct student in best way to turn power on/off. Give student the opportunity to learn best way to turn on machine, e.g., with the finger, pencil, dowel stick, or other method.	Canon Communicator, pencils, dowel sticks Levels: E, M, H
Identifies parts of machine.	Identifies shift key. Identifies number keys. Identifies letter keys. Uses shift key to print letters.	Have student practice several times changing shift key so as to print numbers or letters. Give assistance as needed.	Canon Communicator pencils, dowel sticks Levels: E, M, H
Operates machine to print words.	Copies words from lists. Produces words from memory.	Present student with appropriate lists to copy.	Spelling/reading word lists appropriate to grade level Levels: E, M, H
Operates machine to print sentences.	Produces short sentence.	Provide word lists and have student practice printing appropriate phrases.	Spelling/reading word lists appropriate to grade level Levels: E, M, H

STRAND Cassette Recorder/Player SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Locates and presses buttons.	Locates: on/off switch record fast forward play rewind speed control volume control track selector.	(Teacher models.) Present opportunities for practice at school and home. Provide hand-over-hand guidance. Give assistance as needed.	Cassette recorder or cassette player, cassette tape Levels: E, M, H
Inserts tape cassette into aperture.	Presses button to open aperture or lifts open lid of aperture. Identifies which side of cassette goes into aperture. Slides in cassette. Closes aperture.	Provide hand-over-hand guidance. (Teacher models.) Let student independently insert cassette into aperture at home and school.	Cassette recorder or cassette player, cassette tape Levels: E, M, H

STRAND Cassette Recorder/Player SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses buttons appropriately.	Identifies: on/off switch record fast forward play rewind speed control volume control track selector. Demonstrates use of machine. Presses buttons with care.	Give assistance. (Teacher models.) Provide hand-over-hand guidance.	Cassette recorder or cassette player, cassette tape Levels: E, M, H

STRAND Corrective Lenses

SUBJECT Assistive Devices

LEARNING Use of Eyeglasses/Contact Lenses

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Tolerates wearing eyeglasses.	Allows area around eyes, nose, and ears to be touched. Allows glasses to be placed upon face. Allows hooks of glasses to be placed around ears. Tolerates wearing glasses for extended wearing time.	Use a variety of different materials to rub or use around eyes, nose, ears. Chart baseline data; monitor to build duration. Provide hand-over-hand assistance as needed. Present opportunities for practice at home and school. (Teacher models.)	Masks, featherduster, cut-out paper glasses, glasses Levels: E, M, H

STRAND Corrective Lenses

SUBJECT Assistive Devices

LEARNING Use of Contact Lenses

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Tolerates wearing contact lenses.	Allows area around eyes to be touched. Allows contact to be placed in eyes. Tolerates lenses for a monitored period of time before removal. Tolerates lenses for prolonged period.	Brush eye lashes with a clean mascara brush. (Use one brush per pupil to avoid spreading infection.) Place clean, wetted finger around eye area. Fade level of assistance. (Teacher models.) Provide hand-over-hand guidance. Give assistance as needed. Present opportunities for practice at home and at school.	Mascara brushes, contact lenses Levels: E, M, H

STRAND Corrective Lenses

SUBJECT Assistive Devices

LEARNING Use of Eyeglasses/Contact Lenses

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Wears eyeglasses/lenses in appropriate situations.	Tolerates wearing corrective lenses for a given period of time. Realizes the importance of wearing corrective lenses. Recognizes appropriate situations for wearing corrective lenses. Wears lenses in appropriate situations.	Suggest practical and appropriate opportunities for home and school practice. Provide hand-over-hand guidance. Provide assistance as needed. Present the learning situations with and without lenses. Discuss with student her/his ability to complete tasks with/without lenses.	Corrective lenses Levels: E, M, H

STRAND Corrective Lenses SUBJECT Assistive Devices

LEARNING Use of Eyeglasses/Contact Lenses

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Recognizes when lenses need to be replaced.	Recognizes when lenses are: scratched shattered need changing due to change in eyes. Recognizes that lenses (above) need to be replaced.	Present the student with damaged and nondamaged lenses so that he/she can discriminate between the lenses that need to be replaced. (Teacher models.) Suggest practical and appropriate opportunities for home and school practice. Provide hand-over-hand guidance. Give assistance, as needed.	Variety of damaged corrective lenses (scratched, shattered, or incorrect optical correction) as well as lenses with correct optical correction Levels: E, M, H

STRAND Corrective Lenses SUBJECT Assistive Devices

LEARNING Care of Eyeglasses/Contact Lenses

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Replaces glasses/lenses in case when not in use.	Removes glasses/lenses. Opens own glass case or contact case. Places corrective lenses in case. Closes case.	Model procedure for student. Have student practice at home by placing glasses/lenses in appropriate case before bedtime or when not in use. Provide hand-over-hand guidance. Give assistance, as needed.	Corrective lenses, case Levels: E, M, H
Cleans lenses with proper material.	Determines when glasses/contact lenses need cleaning. Acquires appropriate cleaning materials. Cleans corrective lenses. Dries eyeglasses and/or inserts wetted contact lenses.	Have student verbally list cleaning material needed to keep corrective lenses clean. Provide hand-over-hand guidance. Give assistance as needed. Suggest practical opportunities to practice at home and at school.	Dirty and clean corrective lenses, soft paper tissues water, cleaning solution Levels, E, M, H

STRAND Corrective Lenses

SUBJECT Assistive Devices

LEARNING Care of Eyeglasses/Contact Lenses

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
States when lenses need cleaning.	Recognizes when lenses need cleaning. States when corrective lenses need to be cleaned.	Show student a variety of glasses and have him/her state if they need to be cleaned or not. Provide hand-over-hand guidance. Suggest practical opportunities for practice at home and school. Give assistance, as needed.	Several pairs of corrective lenses, dirty and clean Levels: E, M, H

STRAND Form-a-Phrase

SUBJECT Assistive Devices

LEARNING Operation of a Machine

MODE Direct Selection

VOCABULARY board, activator button (magnet), cassette tape

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Turns machine on/off.	Turns machine on. Turns machine off.	Model the procedure. Give assistance, as needed. Provide hand-over-hand guidance.	Form-a-Phrase
Moves activator button to specific squares. Note: In order to operate machine, student must be able to either hold switch in hand and move across board or use red activator button in some type of adapted head pointer.	Moves activator button to any square he/she chooses. Moves activator button to specific positions on Form-a-Phrase.	Demonstrate how machine "talks" when red button touches a square on machine. Use pictures to correspond to preprinted vocabulary for students who do not read. Ask student to find pictures/words in various positions on board. Give assistance, as needed. Provide hand-over-hand guidance.	Form-a-Phrase board, activator button Levels: E, M, H Teacher-made picture cards; games or activities to teach pre-selected vocabularies

STRAND Form-a-Phrase

SUBJECT Assistive Devices

LEARNING Operation of a Machine

MODE Direct Selection

VOCABULARY board, activator button (magnet), cassette tape

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses machine to produce message.	Identifies vocabulary by moving activator magnet/button to square teacher selects.	Call out words/pictures and ask student to move activator button/magnet to the square named.	Form-a-Phrase board, activator button, pictures/words on squares Levels: E, M, H
	Moves activator button/ magnet to word/picture independently.	Develop lesson plans to teach phrase/ sentence structure when one-word utterances are learned. Give assistance, as needed.	

STRAND Headphones

SUBJECT Assistive Devices

LEARNING Use of Headphones

VOCABULARY headphones

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Tolerates having headphones on head.	Examines headphone. Tolerates having headphone on head.	Give student time to explore headphone tactually. Desensitize student around head area by having student wear different types of hats, caps, earmuffs. Put headphones on for graduated length of time each day. Gradually increase time. Reinforce good behavior. Provide hand-over-hand guidance and teacher assistance, as needed. Present opportunity for practice at home and school. (Teacher models.) Provide reinforcing music or recorded voices which will be pleasing to the student, providing motivation for keeping headphones on.	Headphone, variety of caps, hats, earmuffs, sound system, recorded music and/or voices Levels: E, M, H

STRAND Headphones

SUBJECT Assistive Devices

LEARNING Use of Headphones

VOCABULARY machine jack, plug, headphones

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Inserts headphone plug into machine jack.	Locates machine jack. Locates headphone plug. Holds headphone plug in one hand, plugs into jack.	Model the procedure. Suggest opportunities for practice at home and school at appropriate times. Provide hand-over-hand guidance, as needed. Give assistance, as needed.	Machine jack, headphones Levels: E, M, H
Positions headphones on own head.	Picks up headphones. Places headphone on own head. Adjusts headphone over ears.	Model correct procedure. Suggest practical opportunities for practice at home and school. Provide hand-over-hand guidance. Give assistance, as needed. Fade assistance.	Headphones, record or cassette player Levels: E, M, H

STRAND Magnifier SUBJECT Assistive Devices

LEARNING Operation of Device

VOCABULARY magnifier, focus

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Positions hand magnifier over material.	Picks up magnifier and holds in hand. Places magnifier over material which is stationary.	Model the procedure. Give assistance, as needed. Have student imitate with supervision. Provide hand-over-hand guidance. Suggest opportunities to practice at home and school.	Hand-held magnifier, printed material that student has need to use, e.g., phone book, textbook, food label Levels: E, M, H
Focuses magnifier.	Holds magnifier in one hand. Places over printed material. Adjusts distance from printed material until the print is in focus.	Model the procedure. Give assistance, as needed. Suggest practical opportunities to practice at home and school.	Hand-held magnifier, printed material Levels: E, M, H
Positions stand magnifier over material.	Positions magnifier.	Allow student to use at school and to take home to practice.	Stand magnifier Levels: E, M, H

STRAND Magnifier

SUBJECT Assistive Devices

LEARNING Operation of Device

VOCABULARY tracks, magnifier, focus, adjust

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Focuses magnifier by adjusting position for required distance and size of print.	(Teacher models.) Give assistance, as needed. Fade level of assistance. Provide hand-over-hand guidance.	
Tracks material.	Positions magnifier over printed material. Adjusts focusing distance from printed page. Moves magnifier across printed material according to reading speed.	Give assistance, as needed. (Teacher models.) Provide hand-over-hand guidance. Fade level of assistance. Suggest practical opportunities to practice at school and home.	Printed material, hand-held magnifier Levels: E, M, H

STRAND Magnifier

SUBJECT Assistive Devices

LEARNING Operation of Device

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses magnifier for own use.	Positions magnifier appropriately. Focuses magnifier according to need. Tracks material.	Give assistance, as needed. (Teacher models.) Provide hand-over-hand guidance. Fade level of assistance. Suggest practical opportunities to practice at school and home. (Teacher/parent monitors.)	A variety of types of magnifiers Levels: E, M, H

STRAND Memowriter

SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Identifies parts of the machine.	Moves on-off switch to "on" position.	Give the student opportunities to turn machine on. Provide Memowriter and paper for student to use at home.	Sharp Memowriter, trade paper, text material to be copied Levels: E, M, H
	Locates the letters, numbers, punctuation marks, and print key.	Give the student material to copy on the Memowriter including alphabet, numbers, and punctuation marks. Provide material to be copied at home or during meetings. Provide hand-over-hand guidance as needed. Give assistance, as needed.	
Places paper in Memowriter.	Opens paper guard.	Give the student opportunities to put paper in the Memowriter throughout the school day.	Sharp Memowriter, paper Levels: E, M, H
	Places paper in machine so it will roll outward.	Have student practice putting paper in Memowriter at home at appropriate times.	

STRAND Memowriter SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Guides paper through slit with cutting edge.	Give assistance, as needed. Provide hand-over-hand guidance. Model the procedure.	
Removes paper.	Rolls paper up one space.	Give student opportunities to finish work so the paper can be rolled up one space.	Sharp Memowriter, paper Levels: E, M, H
	Tears paper along cutting edge.	Provide practice in tearing paper evenly. Have student practice removing the paper at home and school at appropriate times. Give assistance, as needed. Provide hand-over-hand guidance.	
Uses machine to produce a message.	Produces words to form a phrase. Produces phrases to form a message.	Give assistance, as needed. Provide hand-over-hand guidance. Models the procedure. Ask student to produce messages at appropriate times at home and at school.	Sharp Memowriter, paper Levels: E, M, H

STRAND Optacon SUBJECT Assistive Devices

LEARNING Use of Machine

VOCABULARY upper-case letters, Optacon, camera eye, right-left sequence

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Identifies upper-case letters tactually.	Moves camera eye in left-right sequence and in a straight line.	Provide practice opportunities with each section.	Optacon, printed material
	Moves camera at end of line back to the left and locates second line.	Suggest opportunities to identify letters with Optacon at appropriate times at home and school.	
	Identifies upper-case letters O I C E S.	Encourage usage during leisure time.	Grapheme Recognition, Stage 1. Telesensory Systems, Inc., 1975, Lessons 1-5. Levels: E, M, H
	Identifies upper-case letters T H A M.	Give assistance, as needed.	
	Identifies upper-case letters U L E N B G.		
	Identifies upper-case letters P V J K.		
	Identifies upper-case letters W X Y Q Z.		
	Identifies all upper-case letters tactually when presented individually.		
	Identifies all upper-case letters tactually when presented in story form.		

STRAND Optacon SUBJECT Assistive Devices

LEARNING Use of Machine

VOCABULARY Optacon, array, tracking aid, horizontal

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Tracks printed material independently with camera.	Places Optacon camera so that two top rows on the array are vibrating. Rests his/her left index finger so that the two vibrating rows are felt as close to the end of the finger as possible, while keeping finger flat. Positions the camera so that the horizontal line is in the middle of the array. Moves camera across this line until reaching blank paper (using the tracking aid).	Suggest appropriate opportunities for practice at home and school. Have student use at home for leisure time reading, for coding mail, and for practice while shopping. Give assistance, as needed.	Optacon training books Printed material that student likes to read Levels: E, M, H

STRAND Optacon SUBJECT Assistive Devices

LEARNING Use of Machine

VOCABULARY tactile, screen, perpendicular, spatial relationships

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Practices moving the horizontal line to the optimal mid-letter position on the stimulator array. Moves camera in straight line and curved line, moving from one line to the next. Tracks a series of letter-sized graphic forms. Tracks common letter groups, word building, paragraph format, and reading comprehension materials.	Suggest appropriate opportunities for practice at home and at school. Give assistance, as needed.	Optacon, reading materials, Optacon training books Levels: E, M, H
Demonstrates fluency in reading varied materials.	Identifies all punctuation marks. Reads practice story with all upper-case letters and punctuation marks.	Suggest appropriate opportunities for practice at home and school. Present student with a variety of materials to read at school, home, and in community.	Optacon, camera, tactile screen, printed material

STRAND Optacon SUBJECT Assistive Devices

LEARNING Use of Machine

VOCABULARY tactile, screen, perpendicular, spatial relationships

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Identifies all numbers tactually. Identifies all lower-case letters in practice stories and text materials. Reads materials in various prints, i.e., self-tactics, bold weighted. Reads words and materials of increasing length. Reads practice poems.	Give assistance as needed.	Optacon training books Grapheme Recognition, Stage 1, Lessons 1-17.

STRAND Optacon SUBJECT Assistive Devices

LEARNING Use of Machine

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Demonstrates fluency by using various tracking techniques, e.g., associating hand and arm movement with continued image movement on tactile screen, moving the camera in straight line from left to right, keeping the camera perpendicular to the print, centering the image on the tactile screen, changing lines without losing place even when lines are uneven, and gaining a sense of spatial relationships through the camera.	Provide a variety of materials to be read at school and at home.	Optacon, printed materials Levels: E, M, H

STRAND Record Player SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY record player, record, turntable, on, off, needle, volume, sit, listen, Talking Book

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Turns record player on/off.	Identifies record player. Plugs record player into electrical outlet. Places record on turntable. Selects appropriate speed for record. Locates on/off switch. Uses dominant hand to turn record player on or off.	Discuss procedure and demonstrate. Provide physical assistance. Observe and give verbal guidance. Ask family to give guidance as necessary at home.	Record player, record, Talking Book machine Levels: E, M, H
Plays record.	Picks up tone arm from rest, moving it toward record and places needle on appropriate spot on record. Adjusts volume as desired. Removes record from turntable when finished.	Discuss and demonstrate. Provide physical assistance. Observe and give verbal guidance. Ask family to give guidance as necessary at home.	Record player, record, Talking Book machine Levels: E, M, H

STRAND Record Player SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY off, on, cover, hinges

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Replaces cover on machine.	Turns machine to off position. Replaces machine cover at a right angle. Slips hinges in place. Brings cover down. Snaps both latches closed at front of machine.	Demonstrate, and have student imitate. Present opportunities to put machine away throughout the school day at appropriate times and suggest opportunities for leisure times at home.	Record player, Talking Book machine Levels: E, M, H

STRAND Scan 40 Communicator

SUBJECT Assistive Devices

LEARNING Operation of Machine

MODE Scanning w/Treadle Switch

VOCABULARY board, light, treadle switch, interface

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Turns machine on/off.	Manipulates power switch to turn machine on.		
	Manipulates power switch to turn machine off.		
Scans to find appropriate picture/symbol word.	Activates pre-selected interface (e.g., treadle switch).	Give many opportunities to activate interface (treadle). Explain how light moves when switch is depressed.	Scan 40 board, treadle switch, previously learned pictures, picture-symbols, symbols, letters or words Levels: E, M, H
	Presses treadle switch and watches light move from square to square.	Instruct student to watch the light, to keep pressure on switch, to practice making light start and stop.	
	Presses treadle switch, to stop the scanning, then releases pressure when teacher instructs.	Place one picture randomly in each row and instruct student to stop light on that picture. (At this point student must know cause-effect relationship and how to anticipate when he/she will need to release pressure from treadle switch.)	Previously learned pictures, picture-symbols, symbols, letters or words

STRAND Scan 40 Communicator

SUBJECT Assistive Devices

LEARNING Operation of Machine

MODE Scanning w/Treadle Switch

VOCABULARY board, light, treadle switch, interface

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses machine to produce message.	Presses treadle switch to activate scanning light for picture or word named by teacher.	Place pictures, symbols, letters or words on the board. Instruct student to find various squares with the light.	Scan 40 board, treadle switch, previously learned pictures, picture-symbols, symbols, letters or words Levels: E, M, H
	Presses treadle switch to activate scanning light for desired picture, word or phrase.	Give assistance, as needed.	

STRAND Typewriter SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY press, typewriter, space bar, home-row keys, typewriter, shift key

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Strikes space bar.	Places outer thumb on space bar. Presses down on space bar. Moves thumb off space bar. Repeats steps several times.	Model the procedure. Provide hand-over-hand guidance. Suggest appropriate opportunities for practice at home and school. Call out letters/words, providing opportunities for student to follow directions, to space appropriately.	Manual or electric large or regular type typewriter, paper Levels: E, M, H
Locates and intentionally strikes each key.	Correctly places fingers on home-row keys. Locates and strikes keys of lower-case letters, a-z, with hands centralized on home-row keys. Locates and strikes upper-case letters, A-Z, using shift key, with hands centralized on home-row keys.	Model the position. Provide hand-over-hand guidance. Call out letters, punctuation, and such for student to type. Give typing exercises for accuracy and speed.	Manual or electric large or regular type typewriter, paper Levels: E, M, H

STRAND Typewriter SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY home-row keys, typewriter, shift key, margin, paragraph, space bar

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Locates and strikes numbers 1-0, with hands centralized on home-row keys. Locates and strikes punctuation marks.		
Reproduces a paragraph from copy using correct spacing.	Inserts paper straight. Sets margins. Hits space bar key five times. Reproduces paragraph with correct spacing.	Model the procedure. Provide hand-over-hand guidance. Provide appropriate opportunities to practice typing at school and at home. Give opportunities for practice through use of typing books, recordings.	Manual or electric large or regular type typewriter, paper Written work to copy that motivates student, e.g., recipes, directions to a friend's house, personal or business letter Levels: E, M, H
Use typewriter to produce copy.	Reproduces work from copy. Types own copy.	Provide appropriate opportunities, suggestions to type at home and school.	Manual or electric large or regular type typewriter, paper Levels: E, M, H

STRAND Visualtek SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY Visualtek, camera, left, sliding, table, right, magnification, focus

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Positions printed materials.	Turns on Visualtek. Places printed materials on slide tray under camera. Turns knob at left front of machine to adjust magnification.	Provide hand-over-hand guidance. Model the procedure. Give assistance, as needed. Present opportunities for practice at home and school.	Visualtek, printed materials motivating to student, e.g., phone book, magazine Levels: E, M, H
Adjusts focus.	Places printed material on slide tray under camera. Adjusts knob located at right front to focus.	Provide hand-over-hand guidance. Model the procedure. Present opportunities for practice at home and school. Give assistance, as needed.	Visualtek, printed materials motivating to student, e.g., phone book, magazine Levels: E, M, H
Moves material in appropriate direction and sequence.	Places printed material on sliding table under camera.	Model the procedure. Present opportunities for reading practice at appropriate times at home and school when monitored by teacher/parent.	Visualtek, printed material motivating to student, e.g., phone book, magazine Levels: E, M, H

STRAND Visualtek SUBJECT Assistive Devices

LEARNING Operation of Machine

VOCABULARY

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Adjusts magnification and focuses knobs. Slides printed material from left to right, tracking a line. At end of line, slides from right to left and finds beginning of next line. Moves sliding table according to reading speed.	Provide hand-over-hand guidance, as needed. Give assistance, fading when possible.	

STRAND Walker/Crutches SUBJECT Assistive Devices

LEARNING Use of Walker/Crutches

VOCABULARY walker, lock, crutches

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Positions walker.	Puts walker in front of chair. Locks collapsible walker.	Suggest practice opportunities at home and school using food, toys to motivate student to position walker appropriately. Give assistance, as needed. Provide hand-over-hand guidance.	Walker Food, toys, people--other motivators Levels: E, M, H
Positions crutches.	Places crutches close to body. Bears weight on object (chair, table, something other than crutches) and pulls/pushes to stand. Positions crutches under arm(s).	Suggest opportunities for practice at home and at school. Motivate student to position crutches correctly by using food, toys, people. Give assistance, as needed. Provide hand-over-hand guidance as needed.	Crutches Food, toys, people--whatever motivates student Levels: E, M, H

STRAND Walker/Crutches SUBJECT Assistive Devices

LEARNING Use of Walker/Crutches

VOCABULARY side rail

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Ambulates using pick-up walker.	Stands, holding walker by side rails.	Model the procedure.	Walker
	Positions feet inside walker boundary.	Guide student through activity.	
	Picks up walker, moves forward, leaning body.	Suggest practice opportunities for home and school.	
	Moves walker forward, sets it down.	Encourage student to walk to appropriate places throughout school day.	
Ambulates using crutches with metal arm braces.	Stands with one crutch under each arm.	Model the procedure.	Wooden crutches with metal arm braces
	Bears weight on strong foot.	Guides student physically, as much as possible.	
	Swings crutches forward.	Present practice opportunities at school and home at appropriate times.	
	Swings body up to meet crutches. Repeats the sequence.	Give student specific places to practice.	
		Provide hand-over-hand guidance.	

STRAND Walker/Crutches SUBJECT Assistive Devices

LEARNING Use of Walker/Crutches

VOCABULARY smooth surface, bracing

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Ambulates using roller walker.	Stands, holding walker by side rails.	(Teacher models.)	Roller walker, smooth surface
	Positions feet inside walker.	Provide hand-over-hand guidance, as needed.	Levels: E, M, H
		Give assistance, as needed.	
	Begins walking while pushing walker forward.	Suggest practice opportunities at home and school at appropriate times.	
	Maintains balance and center of gravity over base of support while moving walker forward.		
Negotiates doorway.	Stands in front of door.	Model the procedure.	Crutches or walker
	Bears weight on strong side of body.	Give assistance, as needed.	Levels: E, M, H
	Pushes or pulls door open with free hand.	Suggest practice opportunities at home and school at appropriate times. Examples: walking to-- cafeteria, office, classrooms, shopping centers, doctor's office, restaurants, theaters	
	Holds swinging door open by bracing with body or moves quickly through before door closes.		

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Use

VOCABULARY grasp, release, turn, left, right, push

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Moves wheelchair, using push and release.	Grasps each wheel at top with hands. Moves wheels forward and down. Releases wheels, repositions hands to top of wheels; repeats procedure. When turning corner, grasps one wheel and holds steady while turning other wheel. To turn left--steady left wheel, turn right wheel. To turn right--steady right wheel, turn left wheel.	(Teacher models.) Provide hand-over-hand guidance. String rope at waist level across room, 6 or 8 yards. Have student pull self while in chair across room to strengthen arms. Repeat several times. Have student practice maneuvering chair in crowded environment. Give verbal instructions. Suggest practice opportunities at home and school at appropriate times. Examples: cafeteria office classroom shopping center restaurants theaters	Wheelchair, corner, open areas, safe parking lot, gym Levels: E, M, H

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Use

VOCABULARY ascend, ramp

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Ascends ramp.	Grasps each wheel with respective hand, leans forward slightly and pushes forward on wheels. <u>Quickly</u> repositions hands, pushes forward and down. Continues until top of ramp is reached. When at the top, continues to move or stops and applies brakes.	Have two instructors work together to assist student in hand-over-hand instruction. Give verbal instructions. (Teacher models.) Teacher assistance, as needed. Suggest practice opportunities at home and school at appropriate times. Examples: Ramps at school when arriving and leaving Inclines in parking areas Ramps into public buildings and at homes when entering and exiting	Two adults, wheelchair, graduated ramps Levels: E, M, H

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Use

VOCABULARY Descend

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Descends ramp.	Holds wheels in front position. Grasps and releases wheel in short spurts until bottom of ramp is reached or grasps wheels so that the wheels move slowly through hands until bottom of ramp is reached.	Model the procedure. Have two instructors work together moving wheelchair down ramp. Suggest practice opportunities on ramps at home and school at appropriate times. Examples: Ramp at school when arriving and leaving Inclines in parking areas Ramps into public buildings and at home when entering and exiting	Ramp, wheelchair, two adults Levels: E, M, H

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Use

VOCABULARY backwards, forward, pivot, chair, bed, toilet, next to

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Manipulates wheelchair through doorways independently.	Approaches doorway; opens by pushing or pulling door. Aligns wheelchair in middle of opening (equal distance from sides). Grasps wheels at top and moves hands, at the same time moving straight through doorway. Releases and grasps wheel again until through door. Follows same procedure to go backwards except moves hands backward on wheel after visually checking for clear path.	(Teacher models.) Give verbal instructions. Provide hand-over-hand guidance. Suggest practice opportunities at home and school at appropriate times: Examples: In and out of classrooms In and out of school building In and out of malls, stores, homes, restaurant doors Give assistance, as needed.	Doorway, wheelchair Levels: E, M, H

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Use

VOCABULARY electric wheelchair, battery, reverse, forward, press

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Uses electric wheelchair.	Sits properly in wheelchair. Familiarizes self with control panel (reverse, forward, turn). Presses the control with fingertips (mounted on left or right arm).	Have student practice in open area and on obstacle course. Suggest practice opportunities at home and school at appropriate times. Examples: gym playground parking lot classroom halls yard shopping center neighborhood	Electric wheelchair Levels: E, M, H Note: Student needs: depth perception, sitting balance, good eyesight, and good safety judgment.

STRAND Wheelchair

SUBJECT Assistive Devices

LEARNING Wheelchair Transfers

VOCABULARY transfer, swing-out, footrest

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Positions chair for transfers, assisted transfers.	Note: Student must have strength and coordination to assist with transfer. Positions chair so that student's stronger side is next to destination, at a 90 degree angle. Locks brakes and swings out footrests. Slides forward in chair, feet on floor. Assists pushing to a stand while leaning on teacher, arms around teacher's neck. Pivots stronger side first to destination. Reaches for destination surface and assists in sitting.	(Teacher models.) Give verbal instructions. Give a demonstration with another student who has mastered this skill. Use two teachers, one to lift and transfer, the other to totally guide student through motion. Give assistance, as needed. Suggest practice opportunities at home and school at appropriate times: transfers to desk chair, toilet, bed, theater seat.	Regular chair, two adults, wheelchair Levels: E, M, H

STRAND Wheelchair

SUBJECT Assistive Devices

LEARNING Wheelchair Transfers

VOCABULARY scoot, transfer

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Transfers using a transfer board.	Puts brakes on wheelchair. Places the transfer board on destination surface. Scoots across board.	(Teacher models.) Give assistance, as needed. Provide hand-over-hand guidance. Suggest practice opportunities at home and school at appropriate times: transfer to chair, bed tub, car, sofa.	Transfer board, wheelchair, car, tub, bed, chair, sofa Levels: E, M, H

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Transfers

VOCABULARY kneel, crawl, scoot

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
Performs kneel-to-stand pivot transfers.	Crawls or scoots to handrail/grab bar/ furniture. Pulls to knees, grasps rail/bar/furniture. Pulls to standing, grasping rail/bar/ furniture. Pivots. Sits on chair/bed/ toilet.	Place a desirable item (e.g., toy, food) and have student scoot or crawl towards it. Suggest practice opportunities at home and school at appropriate times. Have student transfer to chair, bed, or toilet. Give assistance, as needed. Provide hand-over-hand guidance. Model the procedure.	Handrail, furniture, chair, bar, bed, toilet Levels: E, M, H
Performs standing pivot and transfers.	Positions wheelchair in front of/next to handrail/furniture. Grasps handrail/grab bar. Pulls to standing. Pivots.	(Teacher models.) Give assistance, as needed. Provide hand-over-hand guidance. Suggest practice opportunities at home and school at appropriate times: transfer to chair, bed, toilet, sofa.	Handrails, furniture, grab bar, chair, bed, toilet Levels: E, M, H

STRAND Wheelchair SUBJECT Assistive Devices

LEARNING Wheelchair Transfers

VOCABULARY transfer board

OBJECTIVE	TASK ANALYSIS	ACTIVITIES	MATERIALS
	Sits on chair/bed/ toilet.	Motivate student to transfer by using food, toys, people.	Food, toys, people, whatever motivates student, automobile, wheelchair, transfer board Levels: E, M, H
Transfers to car.	Positions wheelchair next to car, behind door. Opens car door. Removes or swings out footrest. Positions wheelchair next to car seat. Locks wheelchair. Uses any of the above transfers, as appropriate.	Model the procedure. Present opportunities for practice at home and school when appropriate: to and from school to and from movies, shopping centers. Give assistance, as needed. Provide hand-over-hand guidance. Provide motivation such as a ride to a favorite place: restaurant, movies, shopping center, ice cream shop.	Food, toys, ride in a car--whatever motivates student Levels: E, M, H

RESOURCES

Books

Geuger, Jaclyn S. Orientation to Hearing Aids. Washington, DC: Alexander Graham Bell Association for the Deaf, Inc., n.d.

Hearing Aids--A Guide to Their Wear and Care. Daly City, CA: PAS Publishing Co., 1981. (345-G Serramonte Plaza, 94015)

Facts About Hearing and Hearing Aids. Washington, DC: U.S. Government Printing Office, 1978. (Stock No. SN003-003-02024-9; Publication No. 79-4016)

Grapheme Recognition, Stage 1. Palo Alto, CA: Telesensory Systems, 1975.

Equipment

Form-a-Phrase Board. Sci Tronics, Inc., 523 South Cleivell Street, P.O. Box 5344, Bethlehem, PA 18015.

"The Form-a-Phrase system consists of a main unit and any one of 4 standard user control units. The user selects the desired word or phrase by using a control unit (i.e., wordboard). The main unit speaks the selected utterance in a clear, natural sounding voice (i.e., a man's, woman's, or child's voice can be chosen)."

The standard vocabulary cartridge contains 128 utterances, each consisting of 1-5 words. By combining these utterances, sentences can be formed.

The user can design a custom vocabulary.

Memowriter. Sharp Electronics Corp., Paramus, NJ 07652.

The Memowriter produces a tape much like a cash register as well as an LED read-out. It is both a calculator and a miniature typewriter. Some physically involved students use a pencil to activate the keys as some controlled fine motor use is necessary.

Optacon. Telesensory Systems, Inc. 3408 Hillview Ave., P.O. Box 10099, Palo Alto, CA 94304.

Scan-40 Communicator. J. A. Preston Corp., 60 Page Road, Clifton, NJ 07012.

Scan-40 is a portable unit measuring 14 x 10 1/4 x 3 inches that runs on 5 C-batteries. The unit uses a scanning operational mode. There are 40 squares on the front of the unit that the clinician can put words, pictures, or letters on. A spring action treadle switch activates the unit by means of a red light in each square. The user can activate the treadle switch with his/her hands, feet, head pointer.

There is no voice output. There is an audible alarm located on the 40th square.

Visualtek. Visualtek, 1610 Twenty-sixth Street, Santa Monica, CA 90404.

Visualtek magnifies printed materials from 3 to 60 times their original size, depending on the model. This enables low vision students to read and write materials identical to their classmates, with no time delay while the materials are being enlarged. This device is particularly useful for mainstreamed pupils.

Perkins Braille Writer. Howe Press, 175 N. Beacon Street, Watertown, MA 02172.

Canon Communicator. Canon, Inc., 10 Nevada Drive, Lake Success, Long Island, NY 11042.

The Canon Communicator is an electronic aid to be used by spelling persons only. The keyboard consists of 26 letters of the alphabet and messages are printed on a highly thermosensitve tape by a thermal print head for 5 x 7 matrix-dot printing. It is very small (5" x 3 1/4" x 1 1/2") and portable. It can be strapped securely to the user's wrist, thigh, lap tray. It also comes with a key guard.

Talking Book Machine and Equipment. (Available from Talking Book Library, Louisville Free Public Library.)

A variable speed tape player is available as is a disc player. Free "library selections" are available by mail. Catalogs will be sent to persons eligible for services.

136

137

CITIZEN'S REQUEST FOR REVIEW AND REEVALUATION OF INSTRUCTIONAL MATERIALS

The Jefferson County Board of Education endeavors to meet the needs of all its students by providing on all levels a wide range of instructional materials having diversity of appeal and different points of view. With respect to instructional materials, the Board supports the principles of intellectual freedom inherent in the First Amendment to the *Constitution of the United States* and in the *Library Bill of Rights and the Students' Right to Read* of the National Council of the Teachers of English.

The Board also recognizes that, despite the quality of instructional materials or the credibility of the process used for selecting instructional materials, occasional objections will arise. Therefore, in order to facilitate the resolution of any concerns related to instructional materials, the Board provides the following procedure for review and reevaluation.

Level I—Initial Concern

1. A person having a complaint related to instructional materials states the complaint to a local school principal or unit head or a designee.
2. The school official to whom the complaint is stated schedules a conference with the complainant to discuss the instructional materials.
3. The complainant and the school official discuss the instructional materials during the scheduled conference.
4. Within five (5) business days following the conference, the school official provides the complainant a written decision concerning the complaint.

Level II—Written Request for Review and Reevaluation

1. If a complainant is not satisfied with the school official's decision at Level I, the school official will assist the complainant in filing, with the Superintendent, a written request for review and reevaluation of the instructional materials.
2. The Superintendent accepts the written request for review and reevaluation of instructional materials with the purpose of rendering a decision concerning the complaint. (When appropriate, the Superintendent forwards the request to the Reconsideration Committee.)
3. When requested by the Superintendent, the Reconsideration Committee meets for purpose of formulating a recommendation to the Superintendent concerning the instructional materials.
4. Within twenty-five (25) business days of receiving the written request for review and reevaluation of the instructional materials, the Superintendent notifies, in writing, the complainant concerning disposition of the complaint.

Level III—Appeal

1. In the event the complainant is not satisfied with the Superintendent's decision regarding the instructional materials, the complainant may file with the Jefferson County Board of Education written request for the review of the complaint.
2. Within forty-five (45) business days of receiving the request the Board will notify the complainant of its decision.

Note: The Board considers appeals requesting the view of decisions related to the use of instructional materials to be serious matters. Therefore, person requesting such reviews are advised to present carefully documented, factual information substantiating their claims.

Only upon recommendation of the Superintendent shall access to challenged instructional materials be restricted during the reconsideration process.

REQUEST FOR RECONSIDERATION OF INSTRUCTIONAL MATERIALS

School _____

Please check type of material:

( ) Book	( ) Film	( ) Record
( ) Periodical	( ) Filmstrip	( ) Kit
( ) Pamphlet	( ) Cassette	( ) Other

Title _____

Author _____

Publisher or Producer _____

Request initiated by _____

Telephone _____ Address _____

City _____ State _____ Zip _____

The following questions are to be answered after the complainant has read, viewed, or listened to the school library material in its entirety. If sufficient space is not provided, attach additional sheets. (Please sign your name to each additional attachment.)

1. To what in the material do you object? (Please be specific. Cite pages, frames in a filmstrip, film sequence, et cetera.)

_____

_____

_____

_____

_____

2. What do you believe is the theme or purpose of this material?

_____

_____

_____

_____

3. What do you feel might be the result of a student using this material?

4. For what age group would you recommend this material?

5. Is there anything good in this material? Please comment.

6. Would you care to recommend other instructional material of the same subject and format?

Signature of Complainant

Date

142

143

Please return completed form to the school principal.

9/82